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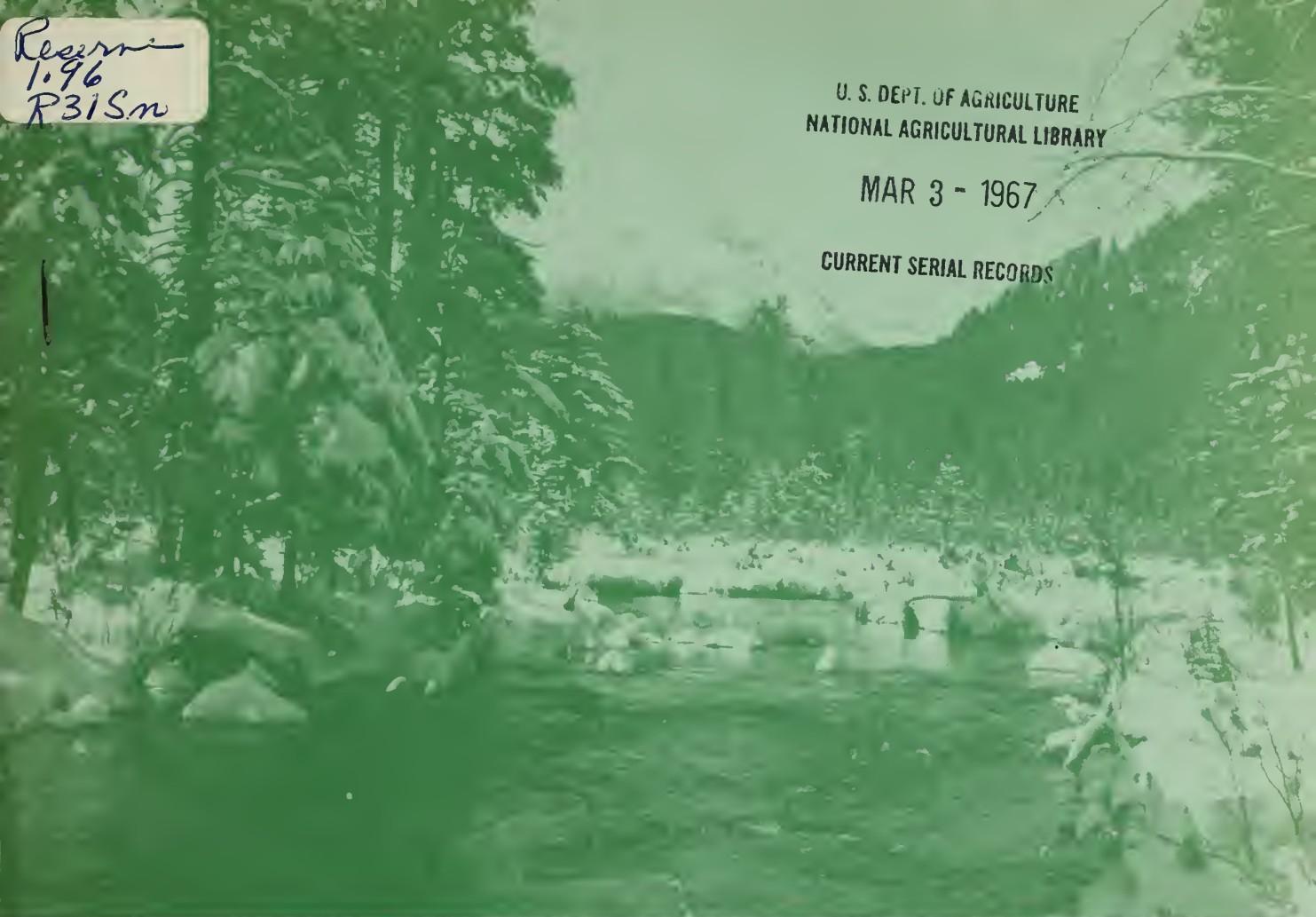
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MAR 3 - 1967

CURRENT SERIAL RECORDS



WATER SUPPLY OUTLOOK FOR ARIZONA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
SALT RIVER VALLEY WATER USERS ASSOCIATION
and
ARIZONA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies
named above in cooperation with the Federal, State and pri-
vate organizations listed on the last page of this report.

AS OF
JAN. 15, 1967

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts became more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83701
Montana	P. O. Box 855, Bismarck, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4001 Federal Building, Salt Lake City, Utah 84111
Washington	840 Bon Marche Bldg., Spokane, Washington 99206
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



**WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
ARIZONA**

(Salt, Verde, Gila and Part of Lower Colorado River Basin)

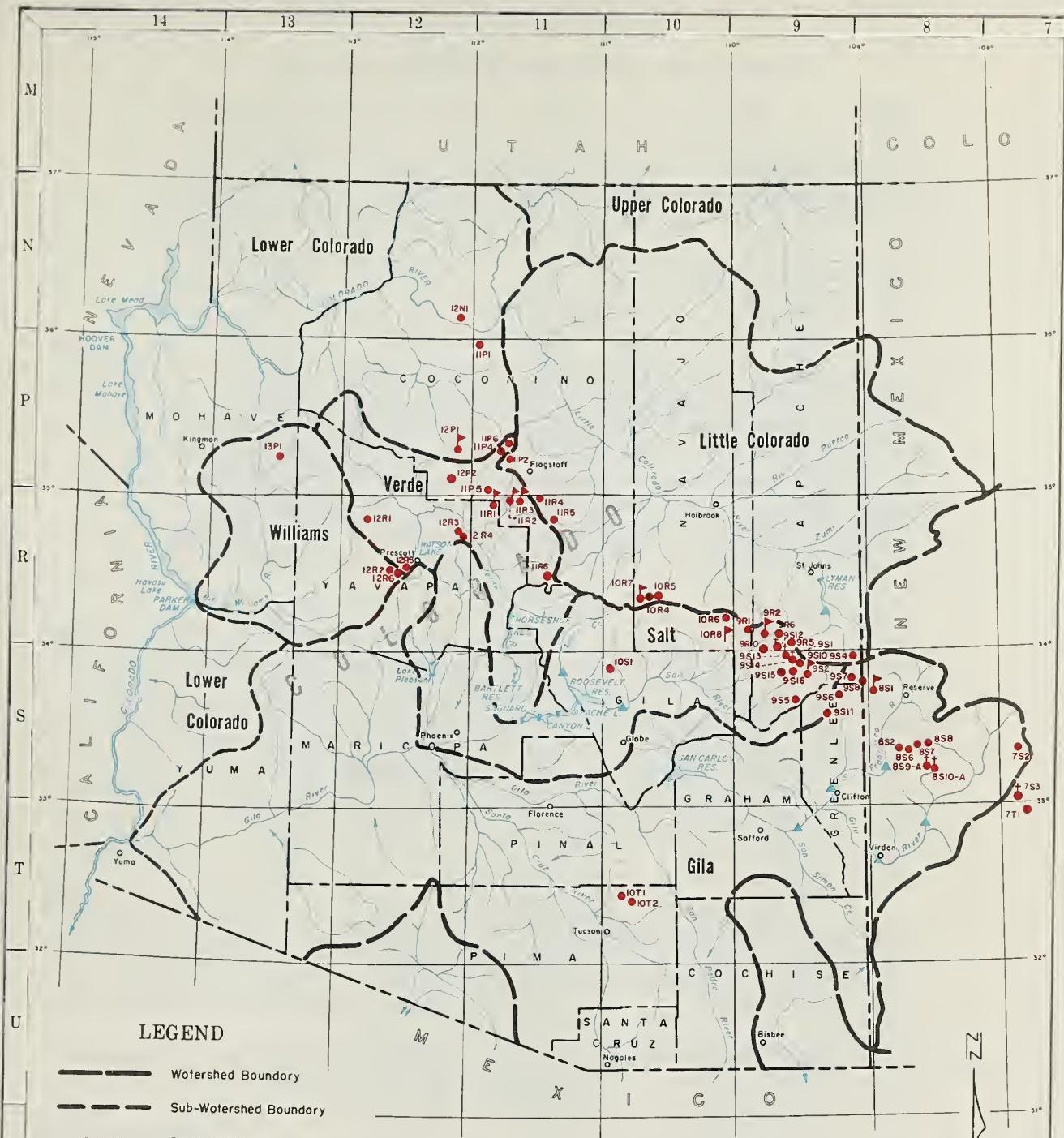
Report prepared by

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Issued by

MERRITT D. BURDICK
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE

VICTOR I. CORBELL
PRESIDENT
SALT RIVER VALLEY WATER USERS ASSOCIATION



ARIZONA COOPERATIVE SNOW SURVEYS

Snow Courses and Sub-Watersheds

25 0 25 50 75
SCALE IN MILES

INDEX to SNOW COURSES and SOIL MOISTURE STATIONS

<u>Number</u>	<u>Name</u>	<u>Sec</u>	<u>Twp</u>	<u>Rge</u>	<u>Elevation</u>	<u>River Basin</u>
11R6	Baker Butte (p)	4	12N	9E	7300	Verde
9S1	Baldy (p)	28	7N	27E	9125	Little Colorado
9S15	Baldy #2	12	6N	26E	10000	Little Colorado
9S16	Baldy #3	13	6N	26E	11000	Little Colorado
10T1	Bear Wallow	6	12S	16E	8100	Gila
9S6	Beaver Head	13	4N	30E	8000	San Francisco
9S10-*	Black River Divide	10	6N	27E	9400	Salt
12N1	Bright Angel	34	33N	3E	8400	Lower Colorado
12R1	Camp Wood	3	16N	6W	5700	Verde
10R7-M	Canyon Creek #2	18	11N	15E	7500	Little Colorado
11R2-M	Casner Park	19	18N	8E	6930	Verde
12P1-M	Chalender	27	22N	3E	7100	Verde
12R6	Copper Basin Divide (p)	23	13N	3W	6720	Verde
10R8-*	Corduroy Creek	4	8N	21E	6000	Salt
9S7	Coronado Trail	26	5N	30E	8000	San Francisco
7T1	Emory Pass	16	16S	9W**	7800	Mimbres
10R6	Forest Dale	2	9N	21E	6430	Salt
11P2	Fort Valley (p)	22	22N	6E	7350	Little Colorado
9R5	Ft. Apache	18	7N	27E	9160	Little Colorado
8S1-M	Frisco Divide	31	6S	20W**	8000	San Francisco
12R4	Gaddes Canyon	11	15N	2E	7600	Verde
10R5	Gentry	36	11N	15E	7650	Salt
11P1	Grand Canyon	21	30N	4E	7500	Lower Colorado
9S11	Hannagan Meadows (p)	19	3N	29E	9090	Salt
11R5	Happy Jack	30	17N	9E	7630	Verde
9R10	Hawley Lake	13	7N	24E	8300	Salt
10R4	Heber (p)	28	11N	15E	7600	Little Colorado
8S9-A	Hummingbird	19	11S	17W**	10550	San Francisco
8S6	Ice King	6	11S	18W**	8020	San Francisco
7S2	Inman	6	11S	10W**	7800	Gila
12R2	Iron Springs	22	14N	3W	6200	Bill Williams
9S2	Maverick Fork (p)	13	6N	27E	9150	Salt
9R2-M	McNary	23	8N	23E	7200	Salt
7S3-A	McKnight Cabin	10	15S	10W**	9300	Mimbres
9R1	Milk Ranch	33	8N	23E	7000	Salt
12R3	Mingus Mountain	3	15N	2E	7100	Verde
8S2	Mogollon	2	11S	19W**	7000	San Francisco
11R4	Mormon Lake	13	18N	8E	7350	Little Colorado
11R3-M	Mormon Mountain (p)	14	18N	8E	7500	Verde
9S12-A	Mt. Ord	4	6N	26E	11000	Salt
11R1-M	Munds Park	7	18N	7E	6500	Verde
11P5-M	Newman Park	25	19N	6E	6750	Verde
9S4	Nutrioso	23	6N	30E	8500	San Francisco
9S5	Pacheta	27	4-1/2N	27E	7800	Salt
8S7	Redstone Trail	5	11S	18W**	8600	San Francisco
10T2	Rose Canyon	15	12S	16E	7300	Gila
8S8	Silver Creek Divide	4	11S	18W**	9000	San Francisco
9S13-A	Smith Cienega #1	10	6N	26E	9700	Salt
9S14-A	Smith Cienega #2	3	6N	26E	9900	Salt
11P4	Snow Bowl #1 (p)	36	23N	6E	10260	Verde
11P6	Snow Bowl #2	31	23N	7E	11000	Verde
9S8	State Line	6	6S	21W**	8000	San Francisco
12R5	White Spar	19	13N	2W	6000	Verde
12P2	Whitehorse Lake	2	20N	2E	7150	Verde
8S10-A	Whitewater	19	11S	17W**	10750	Gila
13P1	Willow Ranch	16	21N	11W	5000	Bill Williams
9R6	Wilson Lake (p)	4	7N	26E	9000	Salt
10S1	Workman Creek	33	6N	14E	6900	Salt

* SOIL MOISTURE STA. ONLY

** NM PRINCIPAL MERIDIAN

M SOIL MOISTURE STA.

(p) STORAGE GAGE

A AERIAL SNOW DEPTH MARKER

ARIZONA WATER SUPPLY OUTLOOK

JANUARY 15, 1967

*
* The Water Supply Outlook for Arizona is very good in
* areas served by storage facilities. Snow cover, however,
* is much below average and subnormal runoff is in prospect
* for 1967.
* *

SNOW COVER

Snow Cover is one-third of normal on the Verde and Gila Watersheds and half of normal on the Salt and Little Colorado Watersheds. Many of the lower elevation snow courses have proportionally more snow than the high courses because the cold weather has prevented significant melting. The Gila Watershed has the least amount of snow with only 10% of what it had a year ago. Deepest snow measured was on the San Francisco Peaks, where there is 42" containing 12.8" of water. This is the result of the heavy storm that hit the Flagstaff area early in December.

PRECIPITATION

Winter precipitation has been below normal on the Gila and Salt Watershed, but much above average on the Verde. Precipitation from the heavy December storm was in the form of rain at elevations below 9000'. This resulted in immediate runoff and the consequent flooding of Oak Creek and the Verde River. December precipitation at the Mormon Mt. gage measured 14.29". Above average precipitation also occurred on the Mogollon Rim, but the storm did not carry into the White Mts.

RESERVOIR STORAGE

All major reservoirs contain much above average supplies of water. Storage in the Salt River Project Reservoirs is 80% of capacity and 230% of average. San Carlos Reservoir presently contains 7.5 times the normal amount for this date.

Storage in the Colorado River Reservoirs is 28% above average, although this is only 47% of their total capacity.

SOIL MOISTURE

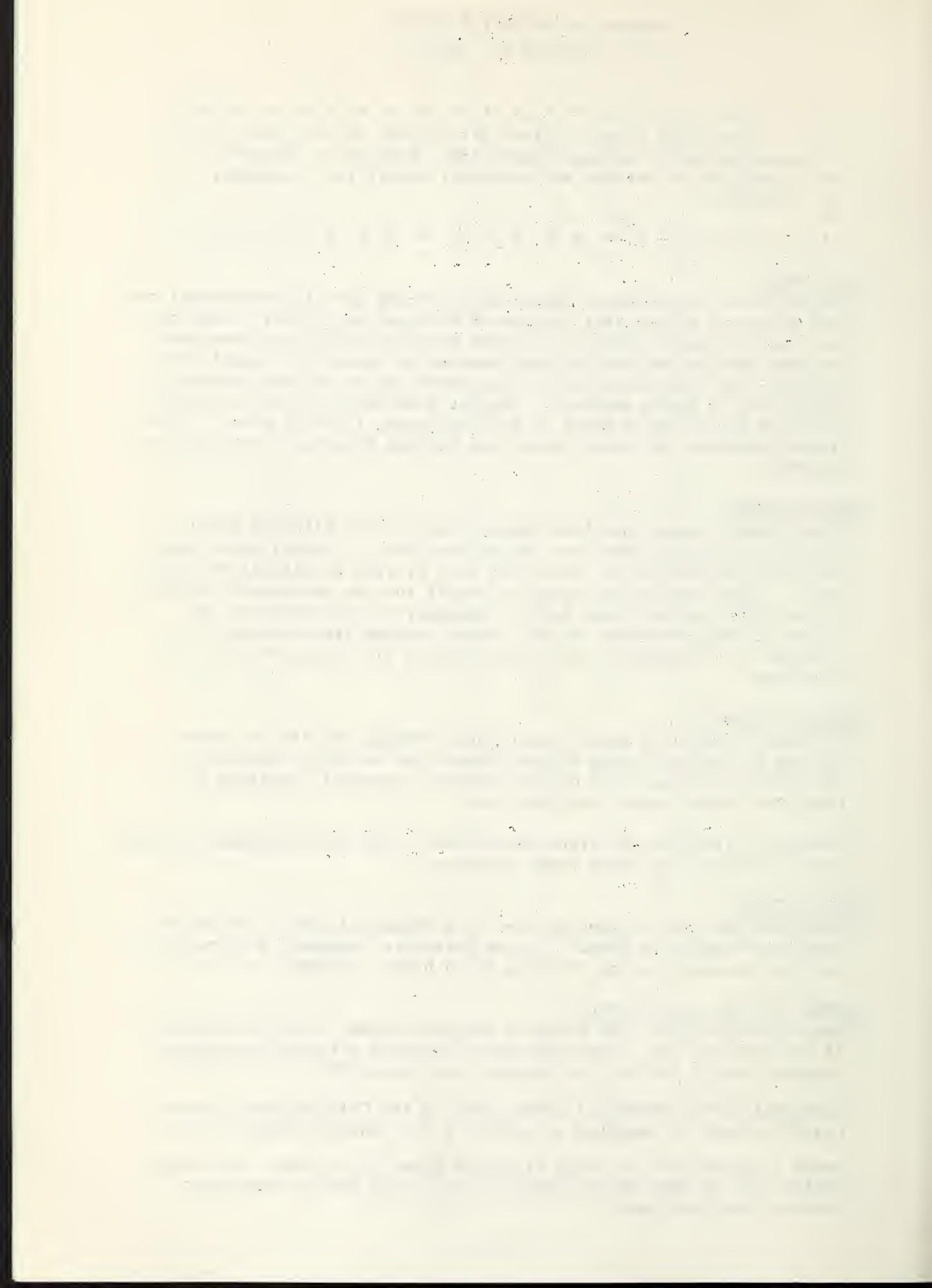
Soils are very wet on much of the Verde Watershed and at the higher elevations along the "Rim." In the White Mts. however, soil moisture is about average, and on the Gila it is below average.

STREAM FLOW AND WATER SUPPLY

Near average stream flow occurred during December with the exception of northern Arizona. The Verde River produced 6 times the average December runoff and hit the highest peak since 1951.

Subnormal spring runoff is anticipated on the Gila and Salt Rivers. Only the Verde is expected to produce a near normal amount.

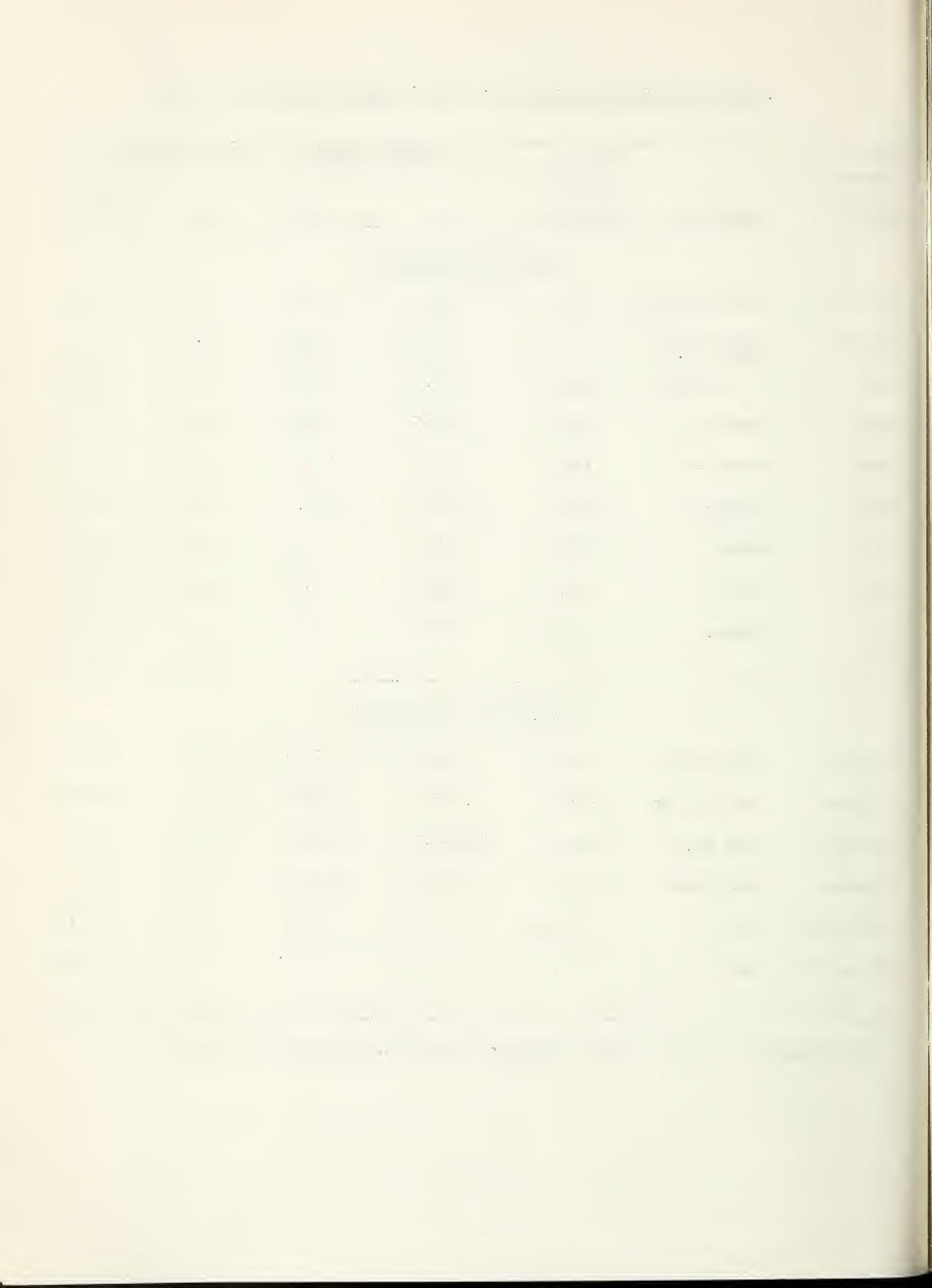
Water supplies will be short along the Upper Gila River. Elsewhere, better than average water supplies are assured due to carry-over storage from last year.



STATUS OF ARIZONA RESERVOIR STORAGE - ABOUT JANUARY 15, 1967

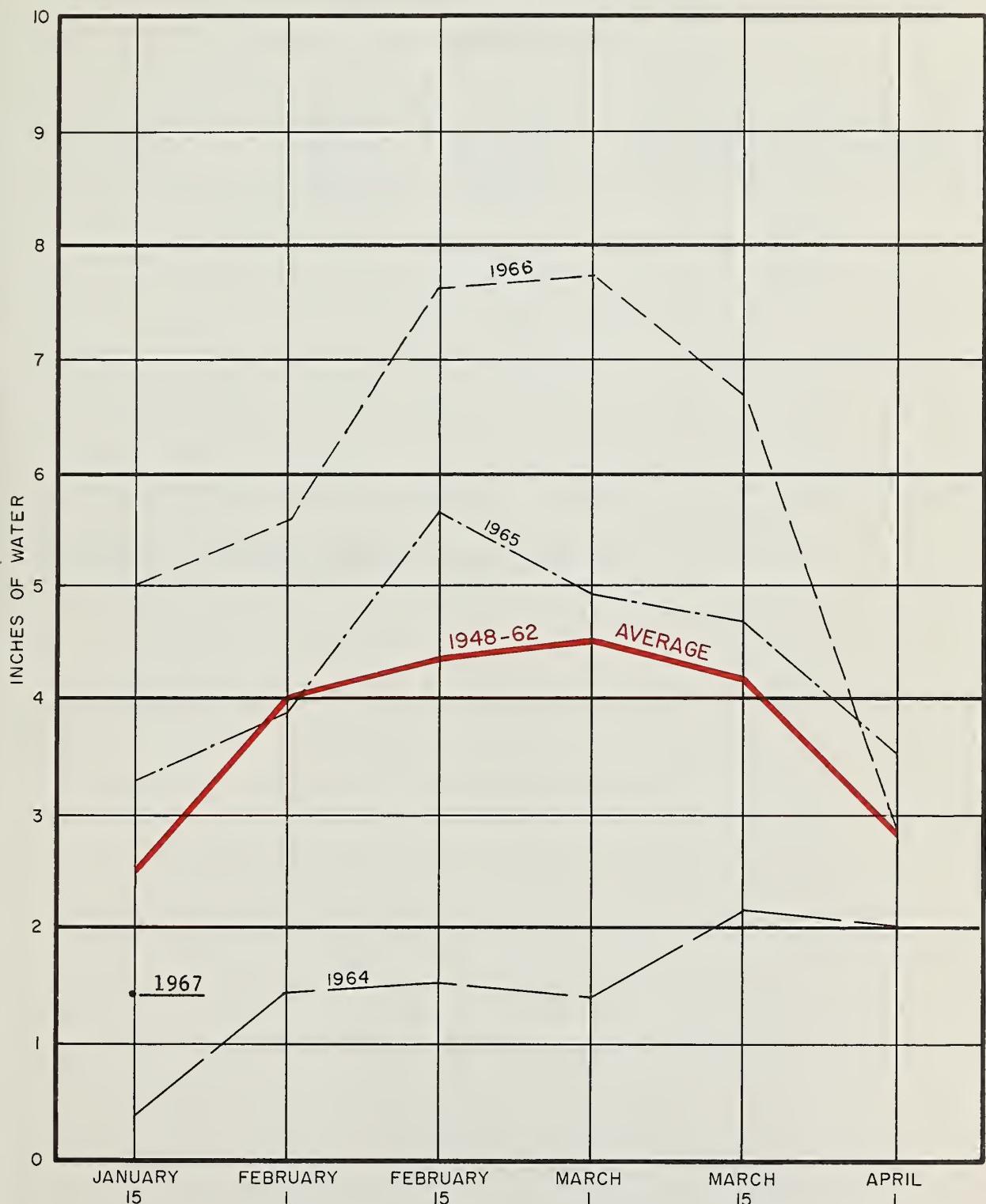
SUB-WATERSHED and/or STREAM	RESERVOIR	USABLE CAPACITY 1000's ACRE FEET	USABLE STORAGE - 1000s ACRE FEET			
		ACRE FEET	1967	1966	1965	15-Year Average 1948-62
<u>GILA RIVER DRAINAGE</u>						
Agua Fria	Lake Pleasant	157.6	126.7	157.5	16.7	26.9
Granite "	Watson Lake Willow Creek	4.7 6.1	3.0 3.9	4.6 6.1	2.1 ---	---
Gila	San Carlos	1,206.0	324.4	353.0	47.7	43.0
Verde	Bartlett	179.5	142.5	153.3	42.5	48.0
Verde	Horseshoe	142.8	61.5	119.0	50.3	20.0
Salt	Roosevelt	1,382.0	1,141.2	1,209.5	374.4	385.1
Salt	Apache	245.0	231.5	238.7	221.9	187.6
Salt	Canyon	58.0	42.6	53.8	37.6	43.1
Salt	Saguaro	70.0	48.6	50.8	55.7	42.2
<u>COLORADO RIVER DRAINAGE</u>						
Colorado	Lake Havasu	619.4	546.3	555.8	543.2	546.9
Colorado	Lake Mohave	1,810.0	1,575.3	1,785.0	1,681.0	1,595.7*
Colorado	Lake Mead	27,207.0	15,568.0	15,328.0	11,171.0	17,704.7
Colorado	Lake Powell	25,002.0	7,733.6	8,865.3	6,215.0	---
Little Colo.	Lyman	30.6	17.0	19.3	9.4	6.6
Little Colo.	Show Low Lake	5.1	0.6	5.1	3.3	0.7*

* Average is for less than 15 years of record in the 1958-62 period.

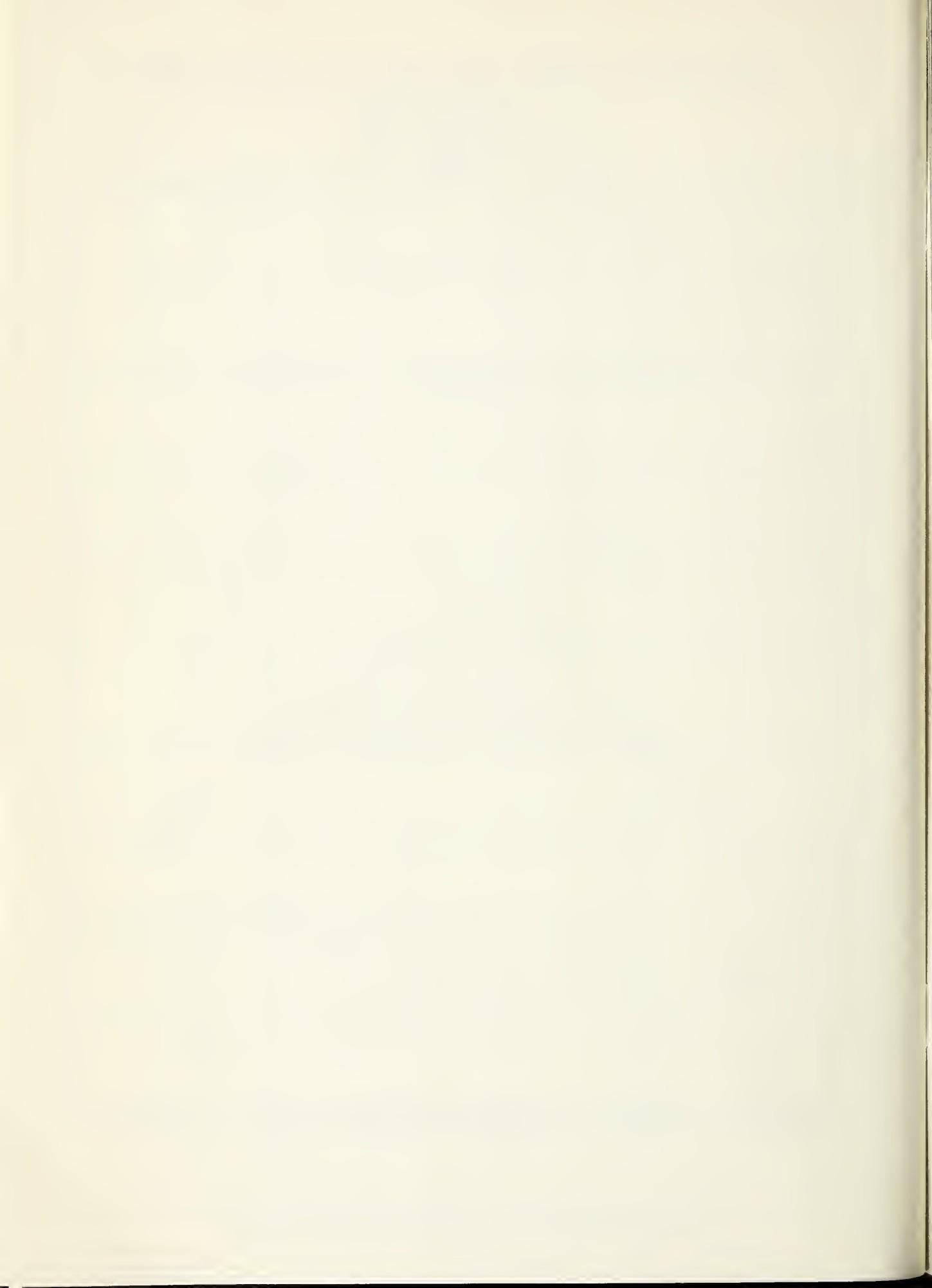


RELATIVE SNOW WATER ACCUMULATION ARIZONA

1967



This graph represents the average snow water content on eleven selected snow courses on Arizona Sub-Watersheds.



SNOW COVER ON ARIZONA WATERSHEDS

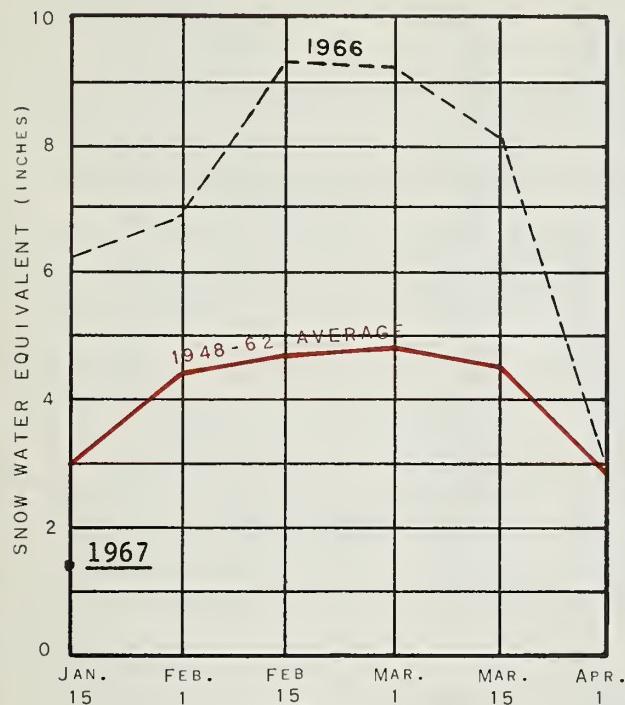
JANUARY 15, 1967

Watershed	No. of Courses Average	Water Content of Snow (Inches)	This Year's Water Content of Snow Expressed as Percent of:	
			Last Year	Average *
Gila	7	0.5	10%	30%
Salt	10	1.5	23%	49%
Verde	7	0.8	23%	33%
Little Colorado	4	1.6	26%	53%

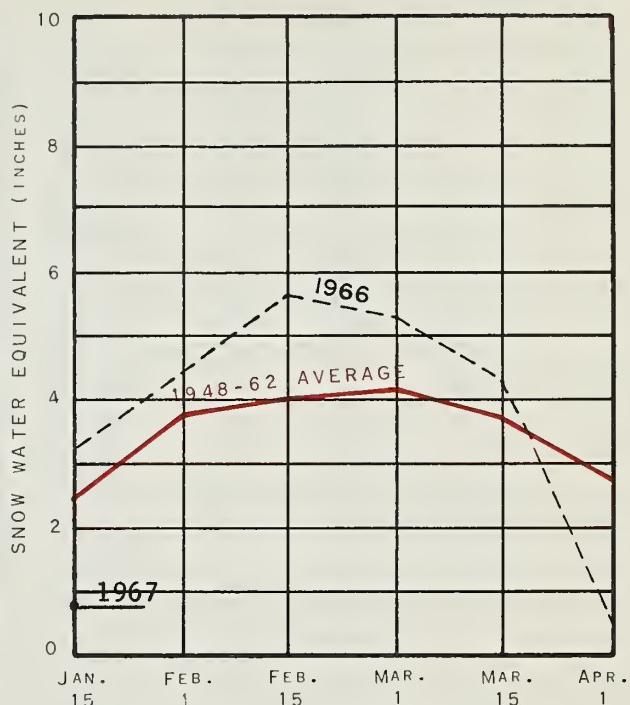
* Actual or Estimated 1948-62, 15-year Average



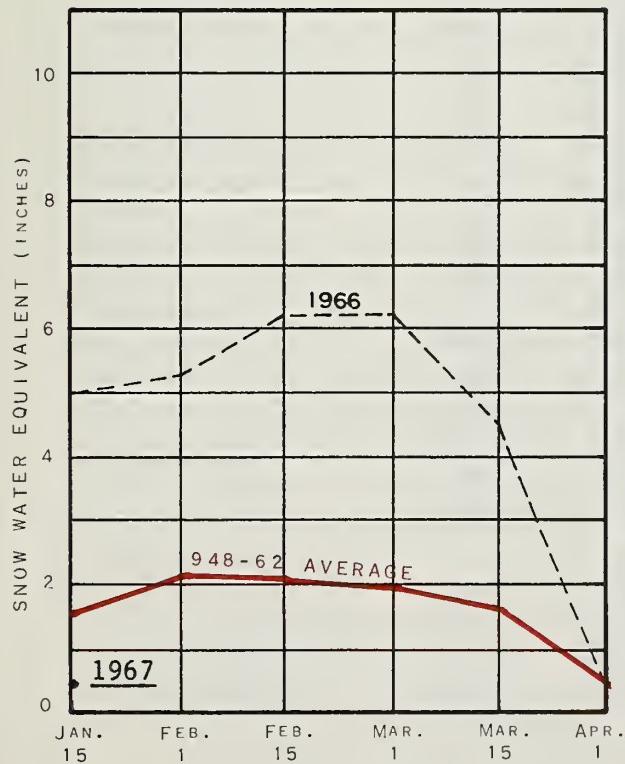
1967
ARIZONA SNOW COVER
BY WATERSHEDS



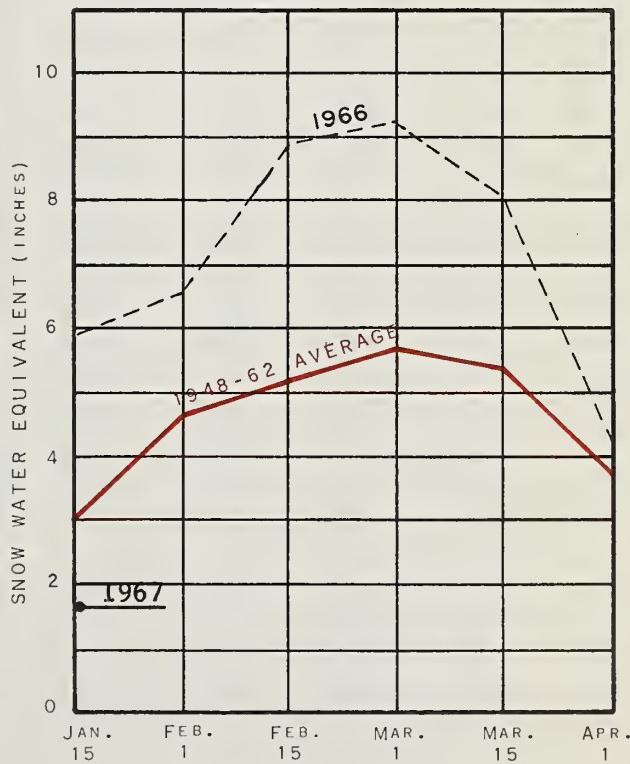
SALT RIVER



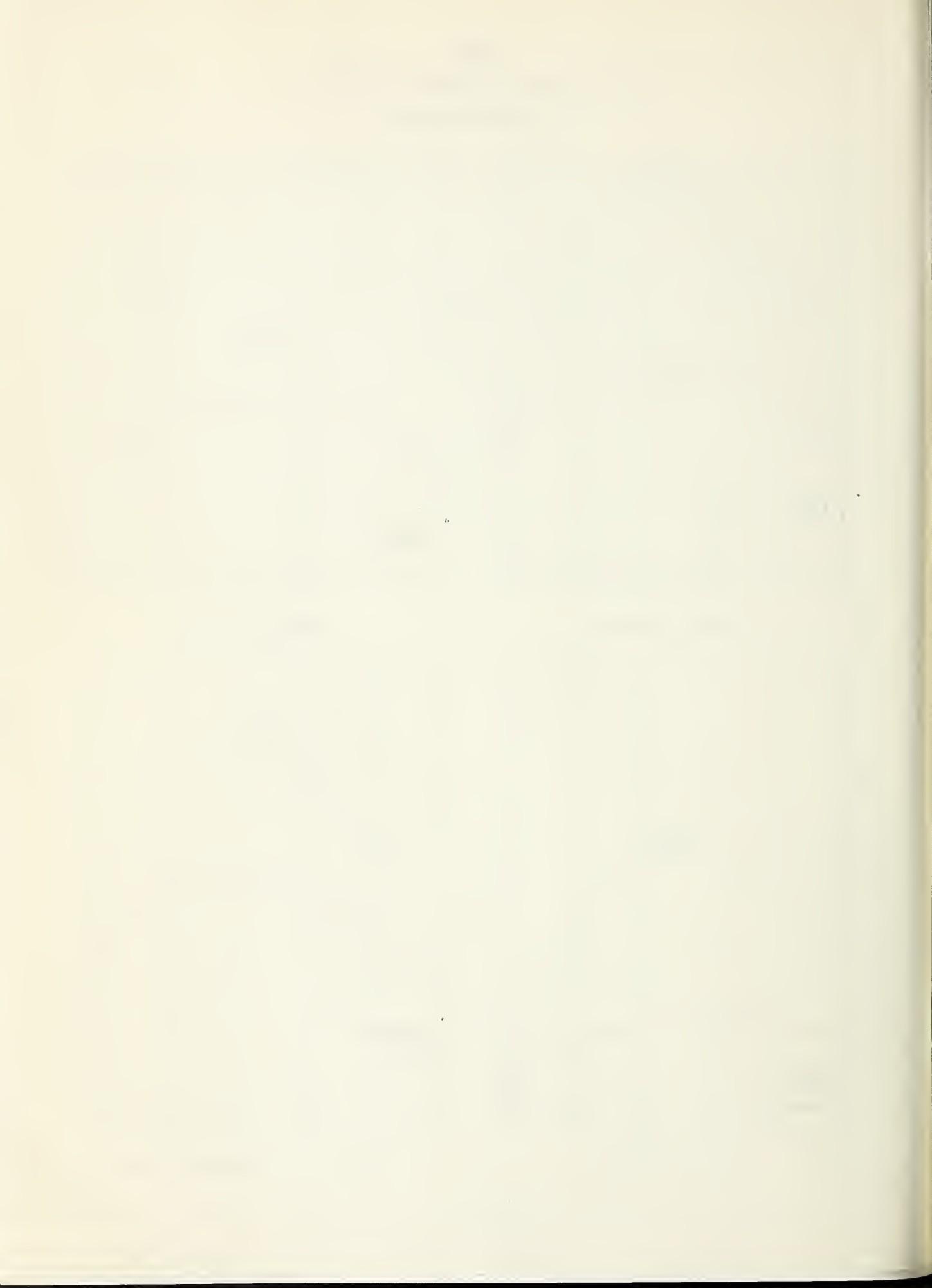
VERDE RIVER



GILA RIVER



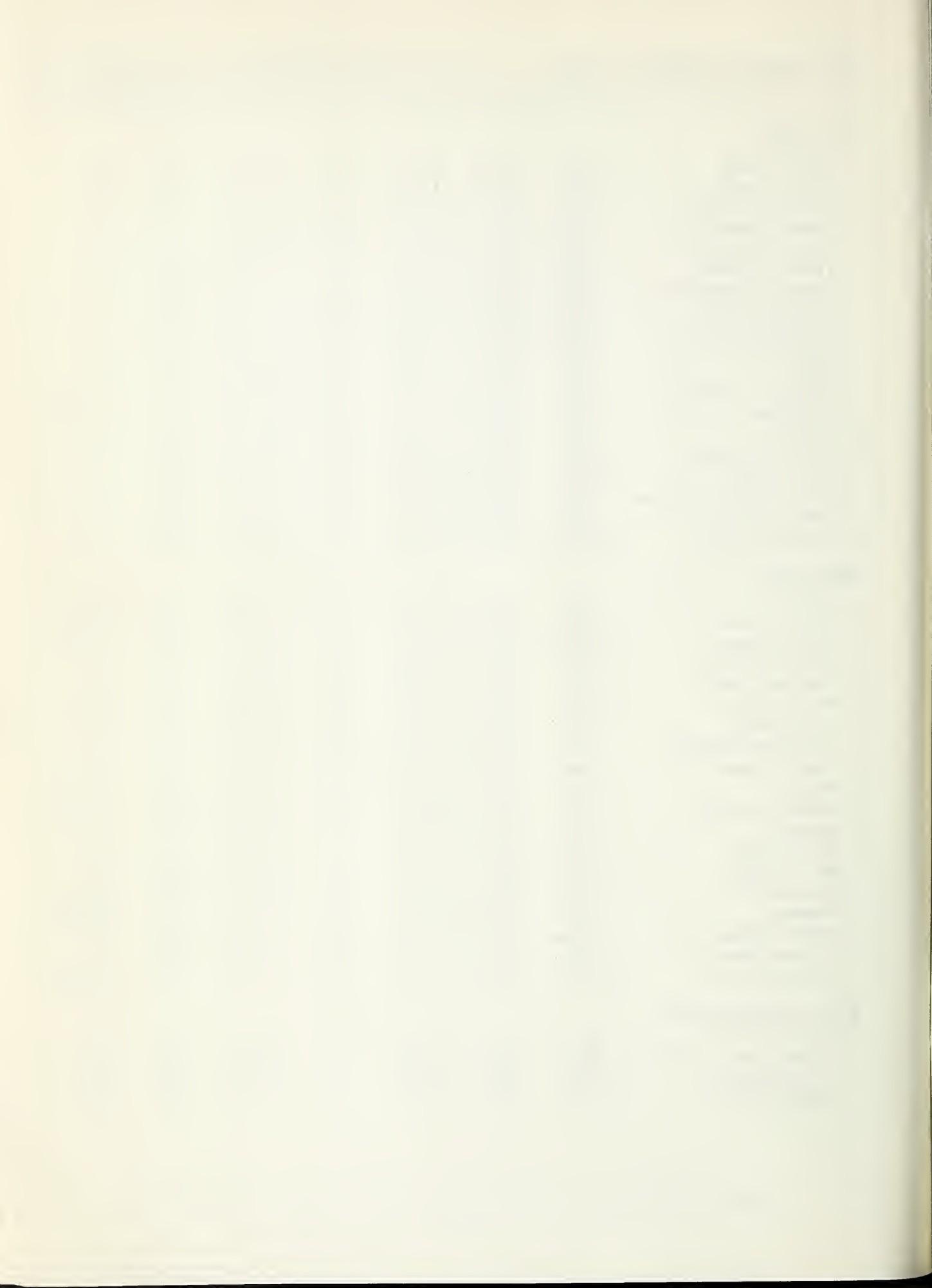
LITTLE COLORADO RIVER



SNOW ABOUT JANUARY 15, 1967

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (inches)	WATER CONTENT (inches)	WATER CONTENT (inches)	AVERAGE ^a
GILA RIVER							
Bear Wallow	10T1	8100	1/13	2	0.5	9.2	2.9
Beaver Head	9S6	8000	1/13	3	0.7	6.0	2.4
Coronado Trail	9S7	8000	1/16	1	0.3	6.5	2.2
Crazy Horse (A)	9T2-A	10200	12/27	12	3.0	---	---
Emory Pass *	7T1	7800	1/13	0	0.0	---	---
Frisco Divide	8S1-M	8000	1/13	2	0.8	6.7	1.7
Hannagan Meadows *	9S11	9090	1/13	9	1.7	12.3	---
High Peak (A)	9T1-A	10600	12/27	18	4.0	---	---
Hummingbird (A)	8S9-A	10550	1/14	0	0.0	13.7	---
Ice King	8S6	8020	1/13	8	1.4	5.5	---
Inman	7S2	7800	1/12	0	0.0	1.8	0.5
McKnight Cabin *	7S3	9300	1/13	2	0.7	---	---
Mogollon	8S2	7000	1/13	4	0.6	2.1	1.2 **
Nutrioso	9S4	8500	1/16	1	0.2	5.0	1.6
Redstone Trail	8S7	8600	1/13	8	2.0	8.2	---
Rose Canyon	10T2	7300	1/13	2	0.6	5.6	1.6
Silver Creek Divide	8S8	9000	1/13	13	3.3	11.2	---
State Line	9S8	8000	1/13	2	0.8	6.9	1.8
Whitewater (A)	8S10-A	10750	1/14	12	3.0	17.8	---
SALT RIVER							
Baldy *	9S1	9125	1/13	10	2.4	8.7	4.0 **
Beaver Head	9S6	8000	1/13	3	0.7	6.0	2.4
Canyon Creek	10R7-M	7500	1/13	7	1.7	3.8	1.6 **
Canyon Point	10R8	7600	1/13	9	2.0	---	---
Coronado Trail	9S7	8000	1/16	1	0.3	6.5	2.2
Forest Dale	10R6	6430	1/13	5	1.6	0.0	0.7
Ft. Apache	9R5	9160	1/13	11	2.6	7.6	4.5 **
Hannagan Meadows	9S11	9090	1/13	9	1.7	12.3	---
Hawley Lake	9R10	8300	1/13	5	1.2	5.1	---
Heber	10R4	7600	1/14	6	1.5	4.3	1.8 **
Maverick Fork	9S2	9050	1/13	13	2.8	12.4	5.7 **
McNary	9R2-M	7200	1/13	4	1.0	2.5	1.7
Milk Ranch	9R1	7000	1/13	3	0.8	1.0	1.0
Mt. Ord (A)	9S12-A	11000	1/14	26	5.5	18.5	---
Nutrioso *	9S4	8500	1/16	1	0.2	5.0	1.6
Pacheta	9S5	7800	1/13	4	1.3	7.4	2.9 **
Smith Cienega (A)	9S14-A	9850	1/14	19	3.8	15.0	---
Wilson Lake	9R6	9100	1/13	16	3.9	8.3	---
Workman Creek	10S1	6900	1/11	6	1.1	5.1	3.5 **
BILL WILLIAMS RIVER							
Camp Wood *	12R1	5700	1/13	0	0.0	0.0	0.9
Copper Basin Divide	12R6	6720	1/13	3	0.8	2.7	---
Iron Springs	12R2	6200	1/13	1	0.2	0.0	1.4
Willow Ranch	13P1	5000	1/13	0	0.0	0.0	1.0

(a) 1948-62, 15 year period. (*) Adjacent drainage. (**) 1948-62 Adjusted Average. (A) Aerial observation: Water content estimated.

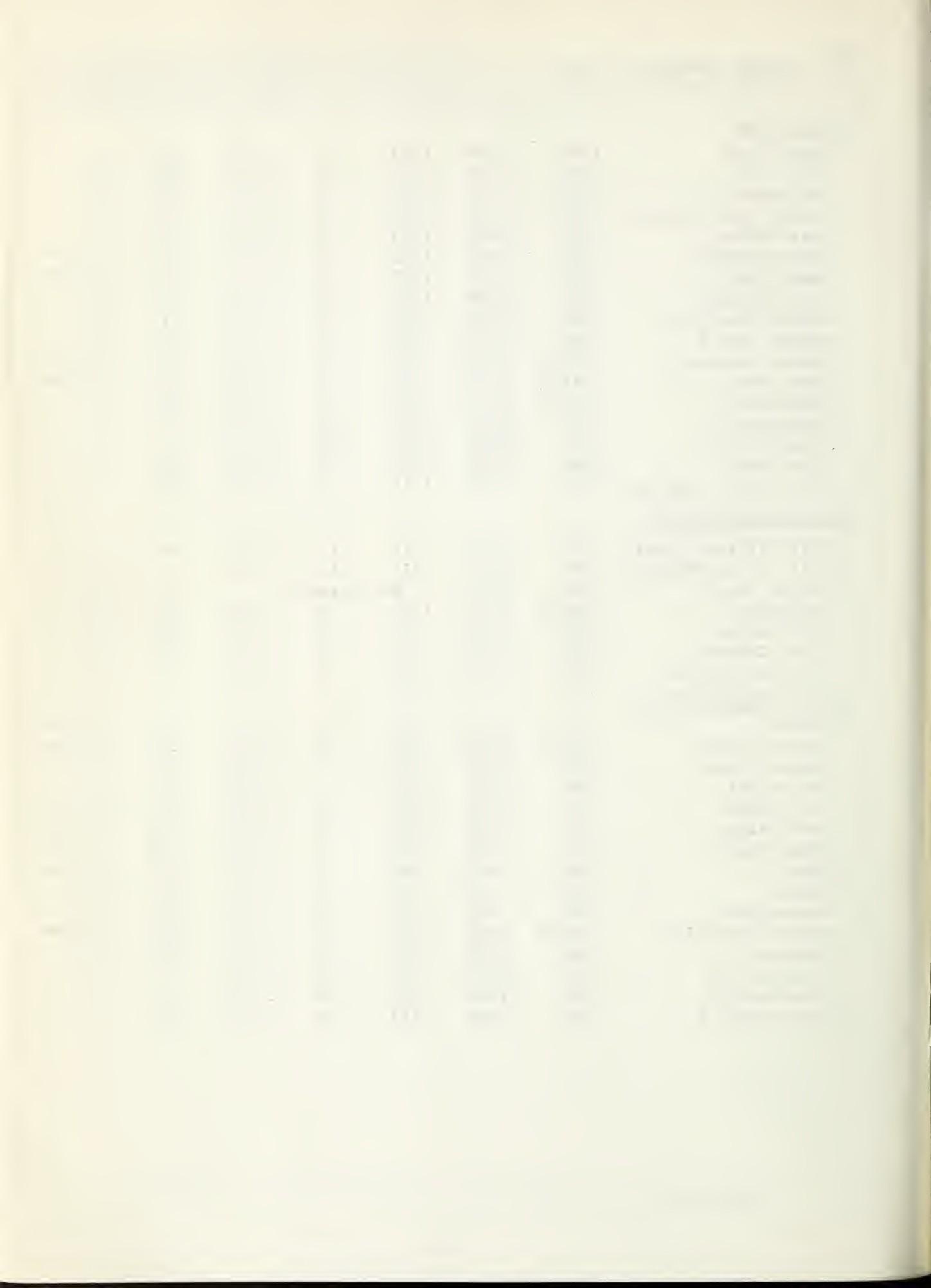


SNOW

ABOUT JANUARY 15, 1967

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	AVERAGE ^a
VERDE RIVER							
Baker Butte	11R6	7300	1/13	4	1.0	9.4	---
Camp Wood	12R1	5700	1/13	0	0.0	0.0	0.9
Chalender	12P1-M	7100	1/13	4	0.9	3.4	2.3
Copper Basin Divide	12R6	6720	1/13	3	0.8	2.7	---
Fort Valley	11P2	7350	1/13	3	0.6	2.6	1.7
Gaddes Canyon	12R4	7600	1/13	3	0.7	4.8	3.4 **
Happy Jack	11R5	7630	1/13	4	0.9	4.8	2.2 **
Iron Springs *	12R2	6200	1/13	1	0.2	0.0	1.4
Mingus Mountain	12R3	7100	1/13	0	0.0	T	0.9
Mormon Lake *	11R4	7350	1/13	6	1.1	3.2	2.3
Mormon Mountain	11R3-M	7500	1/13	5	1.0	4.3	3.3 **
Munds Park	11R1-M	6500	1/12	2	0.5	1.3	1.5 **
Newman Park	11P5-M	6750	1/12	2	0.6	2.0	---
Snow Bowl #1	11P4	10260	1/13	22	9.0	---	---
Snow Bowl #2	11P6	11200	1/13	42	12.8	---	---
White Spar	12R5	6000	1/13	1	0.3	0.0	---
White Horse Lake Jct.	12P2	7180	1/11	3	0.7	---	---
LOWER COLORADO RIVER							
Bill Williams Summit	12P4	8950	1/11	17	5.6	---	---
Bill " Intermediate	12P5	8550	1/11	12	3.3	---	---
Bright Angel	12N1	8400	No Survey			---	5.4 **
Chalender *	12P1-M	7100	1/13	4	0.9	3.4	2.3
Fort Valley	11P2	7350	1/13	3	0.6	2.6	1.7
Grand Canyon	11P1	7500	1/13	3	0.9	1.0	1.7
Williams Ski Run	12P3	7720	1/11	6	1.0	---	---
LITTLE COLORADO RIVER							
Baldy	9S1	9125	1/13	10	2.4	8.7	4.0 **
Canyon Creek	10R7-M	7500	1/13	7	1.7	3.8	1.6 **
Canyon Point	10R8	7600	1/13	9	2.0	---	---
Forest Dale	10R6	6430	1/13	5	1.6	0.0	0.7
Ft. Apache	9R5	9160	1/13	11	2.6	7.6	4.5 **
Fort Valley	11P2	7350	1/13	3	0.6	2.6	1.7
Happy Jack *	11R5	7630	1/13	4	0.9	4.8	2.2 **
Heber	10R4	7600	1/14	6	1.5	4.3	1.8 **
McNary	9R2-M	7200	1/13	4	1.0	2.5	1.7
Mormon Lake	11R4	7350	1/13	6	1.1	3.2	2.3
Mormon Mountain	11R3-M	7500	1/13	5	1.0	4.3	3.3 **
Nutrioso	9S4	8500	1/16	1	0.2	5.0	1.6
Snow Bowl #1	11P4	10260	1/13	22	9.0	---	---
Snow Bowl #2	11P6	11200	1/13	42	12.8	---	---
Wilson Lake *	9R6	9100	1/13	16	3.9	8.3	---

(a) 1948-62, 15 year period. (*) Adjacent drainage. (**) 1948-62 Adjusted Average. (A) Aerial observation: Water content estimated.

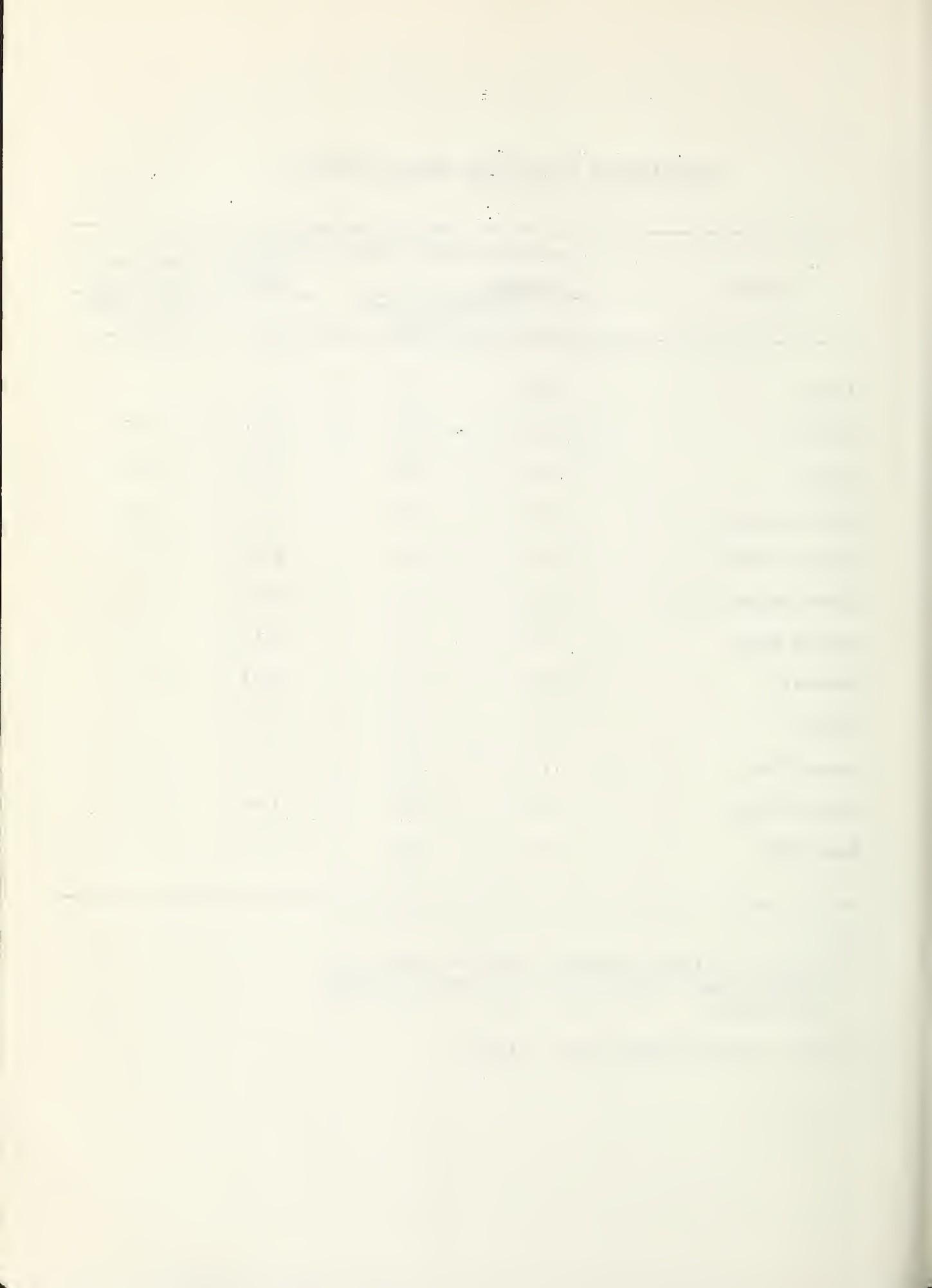


PRECIPITATION AT SELECTED ARIZONA STATIONS 1/

STATION	Precipitation (Inches)			
	December - 1966		Current Water-Year (Oct. 1966 - Dec. 1966)	
	Total	Departure from Average	Total	Departure from Average
Alpine	1.10	- .17	---	---
Ash Fork	3.77	+ 2.59	4.90	+ 2.30
Clifton	.10	- .92	.80	- 1.66
Douglas Smelter	.05	- .62	.31	- 1.46
Flagstaff WBAS*	6.17	+ 4.52	9.49	+ 5.32
Payson Ranger Station	1.86	- .04	4.99	+ .24
Phoenix WBAS	.52	- .33	1.15	- .65
Prescott	4.12	+ 2.35	6.03	+ 1.96
McNary	3.03	+ .66	5.42	- .22
Tucson WBAS	.19	- .73	.57	- 1.61
Winslow WBAS	.26	- .26	1.98	+ .44
Yuma WBAS	.02	- .30	.05	- .77

1/ Data and Analysis furnished by Paul C. Kangieser,
Arizona State Climatologist, U. S. Weather Bureau,
ESSA, Tempe.

* WBAS = Weather Bureau Airport Station



PRECIPITATION

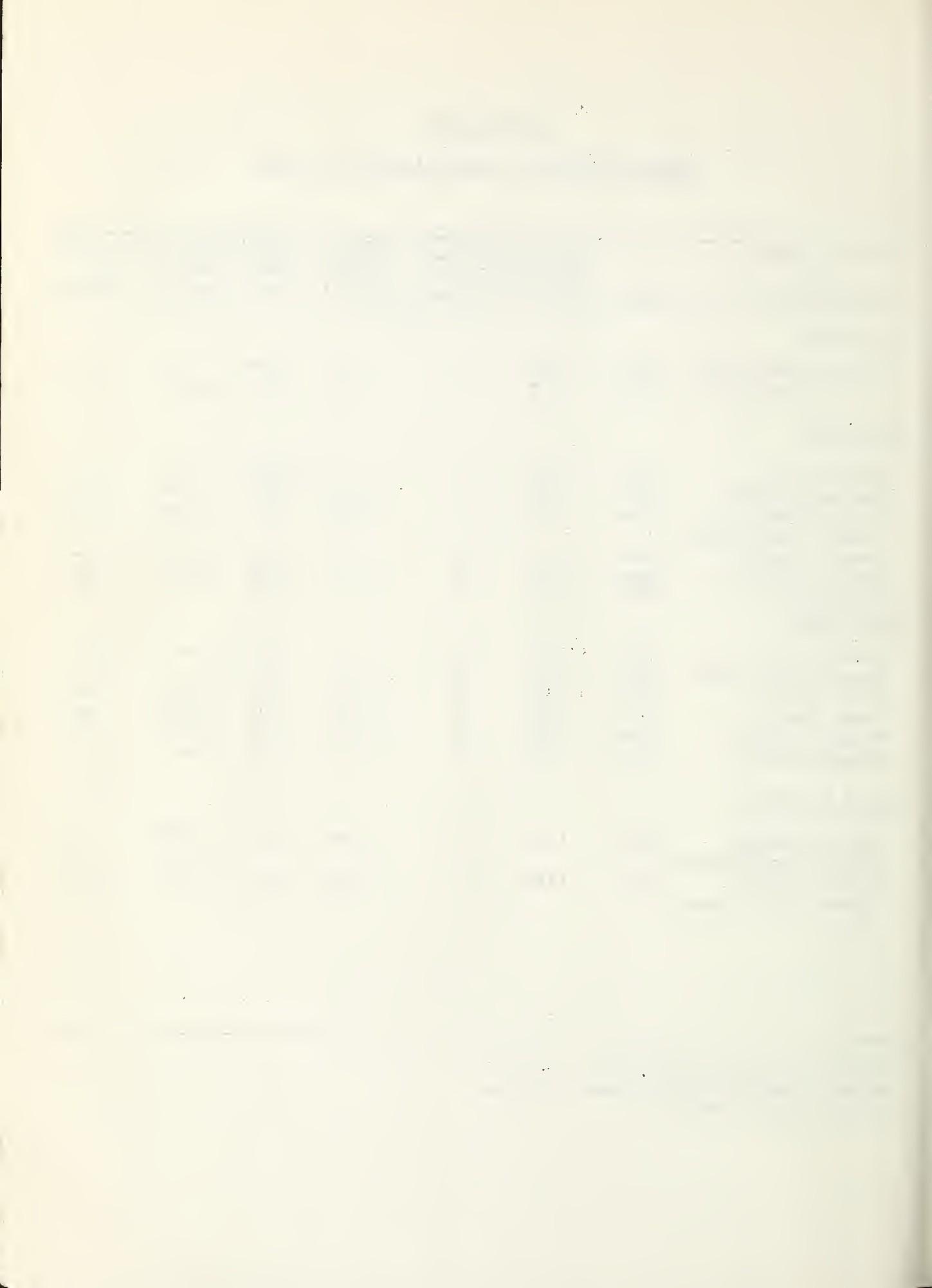
STORAGE GAGE DATA - ABOUT JANUARY 15, 1967

Drainage Basin and Storage Gage	Elev.	Current Data		1948-62	From Approx. 11/1 to Date		
		Date of Jan. 1-15	Reading	Av.Precip.	This 1948-62 Year Average	% of Average	
<u>GILA RIVER</u>							
Silver Creek Divide	9000	1/13	0	---	4.35#	---	---
Hannagan Meadows	9030	1/13	0	1.65*	4.55	6.86*	66
<u>SALT RIVER</u>							
Canyon Point	7600	1/13	0	---	10.77#	---	---
Hannagan Meadows	9030	1/13	0	1.65*	4.55	6.86*	66
Little Wildcat (Heber Snow Course)	7600	1/14	0	2.03*	7.07	6.19*	114
Maverick Fork	9050	1/13	0	1.42*	4.57	5.46*	84
Workman Creek **	6970	1/11	0	2.31	9.86	8.39	118
Wilson Lake	9100	1/13	0	---	4.21	---	---
<u>VERDE RIVER</u>							
Baker Butte	7300	1/13	0	---	9.22	---	---
Copper Basin Divide	6720	1/13	0	---	6.94#	---	---
Fort Valley **	7350	1/13	0	1.23	7.66	4.08	188
Happy Jack **	7480	1/13	0	1.71*	6.82	5.40*	126
Mingus Mountain	7660	1/14	0	1.49	3.30	4.39	75
Mormon Mountain	7500	1/13	0	---	17.61	---	---
<u>LITTLE COLORADO</u>							
Sheep Crossing (Baldy Snow Course)	9125	1/14	0	1.30*	4.33	4.92*	88
Little Wildcat (Heber Snow Course)	7600	1/14	0	2.03*	7.07	6.19*	114

* 1948-62 Adjusted Average

** Data supplied by U. S. Forest Service

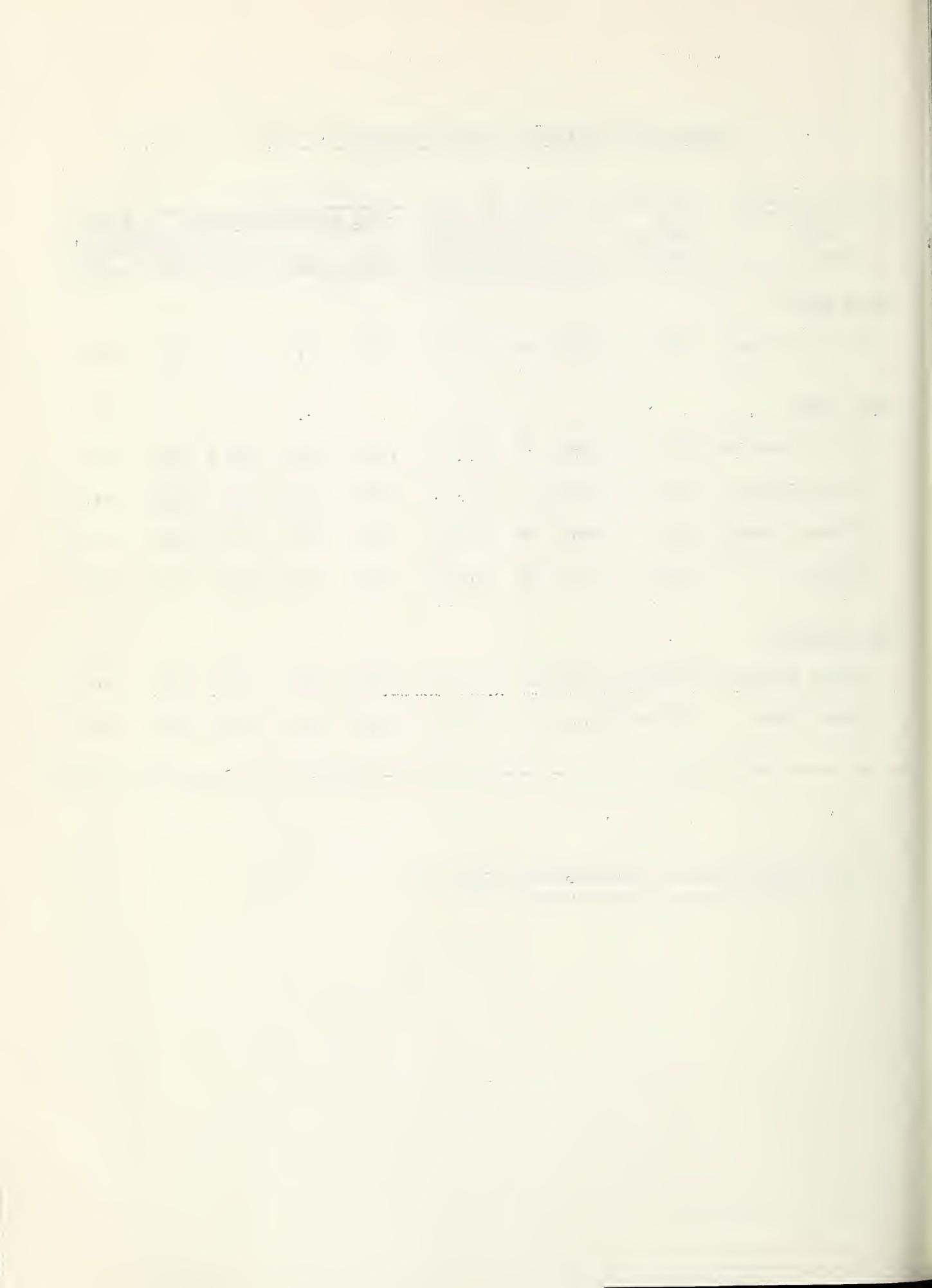
Partially Estimated



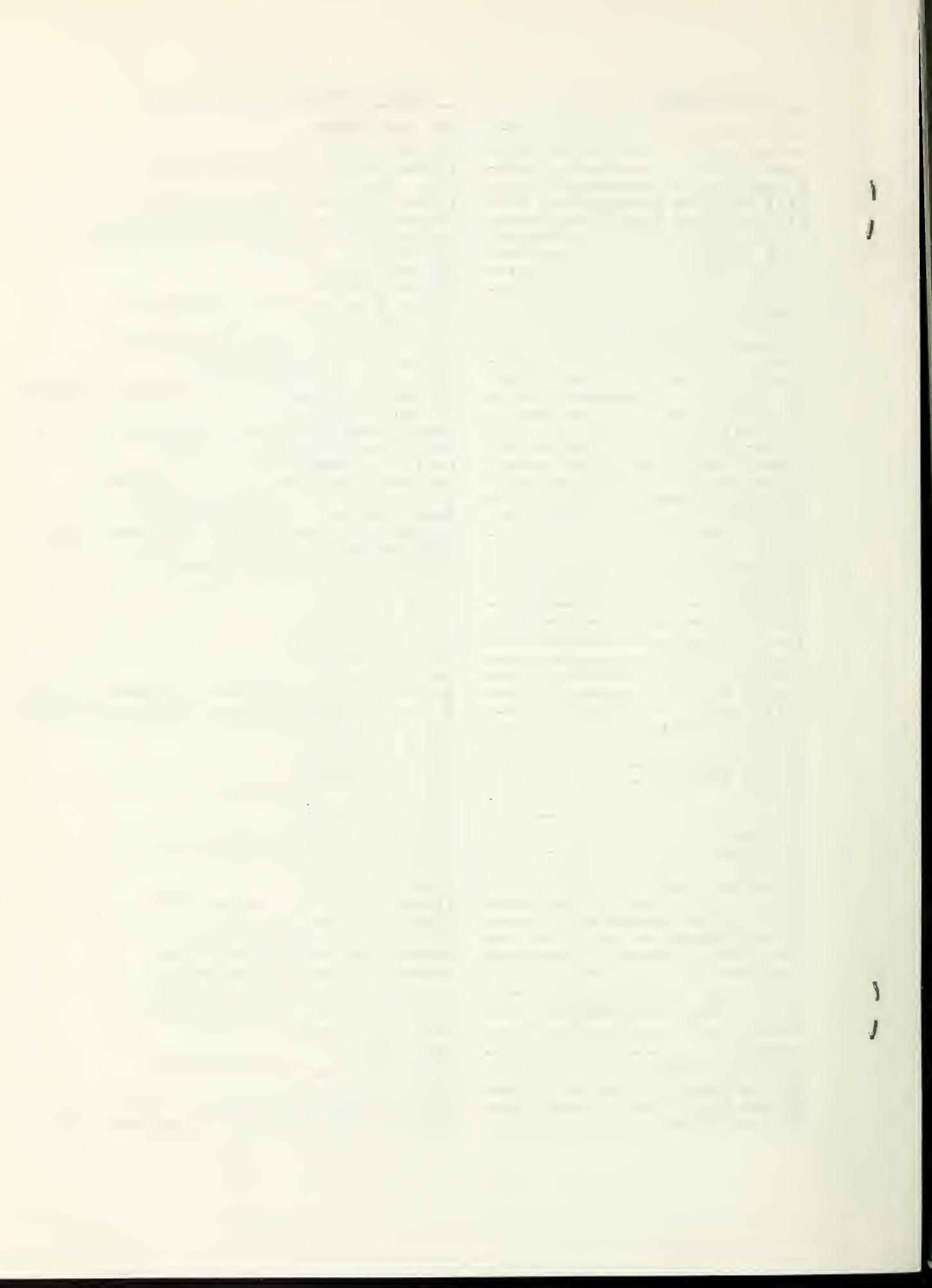
ARIZONA SOIL MOISTURE - ABOUT JANUARY 15, 1967

Drainage Basin and Station	11 Station Number	Soil Profile in Inches			Date	Soil Moisture Content in Inches			Past Record		
		Elev.	Depth	Cap.		1967	1966	1965	Avg.		
<u>GILA RIVER</u>											
Frisco Divide	8S1-M	8000	48	13.3	1/13	7.9	9.4	8.0	10.4		
<u>SALT RIVER</u>											
Black River Div.	9S10-*	9100	48	16.8	1/13	14.8	18.1	17.8	13.8		
Canyon Creek	10R7-M	7500	48	18.3	12/30	18.7	18.2	14.7	14.1		
Corduroy Creek	10R8-*	6000	36	13.5	1/13	7.4	12.8	10.4	7.4		
McNary	9R2-M	7200	48	16.3	1/13	15.0	17.5	17.9	14.2		
<u>VERDE RIVER</u>											
Mormon Mountain	11R3-M	7500	48	16.1	1/13	17.6	17.7	17.8	14.2		
Newman Park	11P5-M	6750	36	17.7	1/12	18.1	19.5	19.5	13.5		

1/ M - Snow Course and Soil Moisture Station
 * - Soil Moisture Station Only



SNOW COURSE	SNOW SURVEYOR
Baker Butte -----	SCS and SRVWUA
Baldy -----	SCS and SRVWUA
Bear Wallow -----	Forest Service - Douglas Smith
Beaver Head -----	N. A. Josh
Bill Williams Intermediate -----	Forest Service - Chuck Sheirer
Bill Williams Summit -----	Forest Service - Chuck Sheirer
Bright Angel -----	National Park Service - Bob Peterson
Camp Wood -----	Lyn Pehl
Canyon Creek -----	SCS and SRVWUA
Canyon Point -----	SCS and SRVWUA
Chalender -----	Forest Service - M. E. Richards
Copper Basin Divide -----	SCS - Bill Gray
Coronado Trail -----	Forest Service - Curtis Connolly
Crazy Horse -----	Forest Service - Art Maynard
Emory Pass -----	SCS - Bob Abercrombie
Forest Dale -----	Bureau of Indian Affairs - Raymond Endfield
Ft. Apache -----	SCS and SRVWUA
Fort Valley -----	Rocky Mountain Forest & Range Exp. Station
Frisco Divide -----	Forest Service - Joe Clayton
Gaddes Canyon -----	Paul G. Lidbeck
Grand Canyon -----	National Park Service - Larry Hakel
Hannagan Meadows -----	N. A. Josh
Happy Jack -----	Forest Service - John Hafterson
Hawley Lake -----	Bureau of Indian Affairs - Raymond Endfield
Heber -----	SCS and SRVWUA
High Peak -----	Forest Service - Art Maynard
Hummingbird -----	Ray Freeman
Ice King -----	James R. Wray
Inman -----	C. H. McCauley
Iron Springs -----	SCS - Bill Gray
Maverick Fork -----	SCS and SRVWUA
McKnight Cabin -----	Ray Freeman
McNary -----	Bureau of Indian Affairs - Raymond Endfield
Milk Ranch -----	Bureau of Indian Affairs - Raymond Endfield
Mingus Mountain -----	Paul G. Lidbeck
Mogollon -----	James R. Wray
Mormon Lake -----	SCS and SRVWUA
Mormon Mountain -----	SCS and SRVWUA
Mt. Ord -----	Air Transit - Show Low
Munds Park -----	SCS and SRVWUA
Newman Park -----	SCS and SRVWUA
Nutrioso -----	Forest Service - Curtis Connolly
Pacheta -----	Everett Wells Jr.
Redstone Trail -----	James R. Wray
Rose Canyon -----	Forest Service - Douglas Smith
Silver Creek Divide -----	James R. Wray
Smith Cienega -----	Air Transit - Show Low
Snow Bowl #1 -----	Forest Service - Angus Porter
Snow Bowl #2 -----	Forest Service - Angus Porter
State Line -----	Forest Service - Joe Clayton
White Horse Lake Junction -----	Forest Service - Chuck Sheirer
White Spar -----	SCS - Bill Gray
Whitewater -----	Ray Freeman
Williams Ski Run -----	Forest Service - Chuck Sheirer
Willow Ranch -----	Tiny Miller
Wilson Lake -----	SCS and SRVWUA
Workman Creek -----	Rocky Mountain Forest & Range Exp. Station



The Following Organizations Cooperate in the Arizona Snow Survey Work

FEDERAL

Department of Agriculture
Soil Conservation Service
Forest Service
 Apache Forest
 Coconino Forest
 Coronado Forest
 Gila Forest
 Kaibab Forest
 Prescott Forest
 Rocky Mountain Forest and Range Experiment Station
 Tonto Forest

Department of Commerce
Weather Bureau
 Arizona Section

Department of Interior
Bureau of Reclamation
 Region III
Geological Survey
 Arizona District
Bureau of Indian Affairs
 Fort Apache Reservation
 San Carlos Irrigation Project
National Park Service
 Grand Canyon National Park

Gila Water Commissioner
Safford, Arizona

STATE

Arizona Agricultural Experiment Station

IRRIGATION PROJECTS

Salt River Valley Water Users' Association
Phoenix, Arizona
San Carlos Irrigation and Drainage District
Coolidge, Arizona

PRIVATE

Southwest Forest Industries, Inc.
McNary, Arizona

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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with the Snow Survey”